POWER PCB

MAIN PCB

LVDS CABLE

DRIVER BOARD

SPEAKER

T-CON PCB (under shield)

SPEAKER

SERVICE BULLETINS

6/20/11 Issues will be apparent if options bytes are not set
ASC20110620001

Version		Parts No	Short Description
ALL		BN44-00340B	Power PCB
ALL		BN96-13226B	Function & IR PCB
ALL		BN94-02620L	Main PCB
ALL		BN07-00831A	Panel
ALL		BN81-04412A	T-CON PCB
ALL		BN96-10689A	Stand Guide Neck
ALL		BN96-12767B	Rear Cover
ALL		BN96-13556C	Front Cover
ALL		BN96-12795C	Stand Guide
ALL		BN96-12762F	Stand Base
ALL		BN40-00163A	Tuner
ALL		BN96-12837A	Speaker
ALL		BN96-12723C	LVDS Cable
ALL		3903-000467	Power Cord
ALL		BN59-01076A	Remote
ALL		BN63-01798B	Cleaning Cloth

HELP : 1-888-751-4086 (Tech Support)
GSPN
http://gspn3.samsungcsportal.com

PLUS ONE
http://my.plus1solutions.net/clientPortals/samsung

HOT TIPS
Power On Problems: (see **page 2**)
Video Problems: (see **pages 3,4**)
TIP: After replacing Main/Panel picture is upside down.
Fix: Test Mode/Mirror Option/Toggle

FIRMWARE
2/21/2011
Firmware for Valencia 1G Model Version : 1035.0   Folder Name: T-VALAUSC
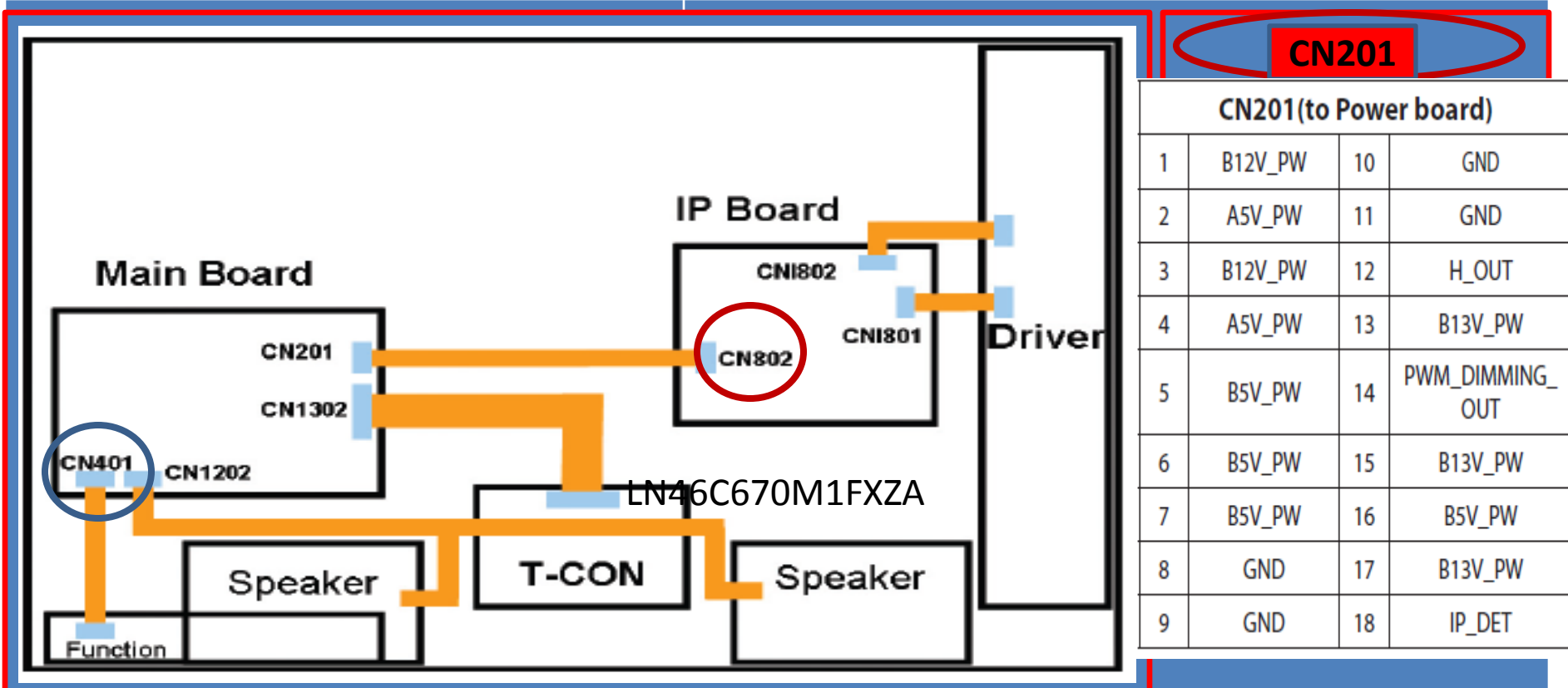**Support Netflix 2.1 and MLB.tv apps.**
Add "3D Optimize" option on Menu for better 3D image.(Only LCD/LED TV)
And this firmware prevents below issues
. 'USB Power Overload' message pops up even USB port is not connected
. HDMI ports recognition error and signal loose
. Plug & Play is displayed whenever turning on TV.

IP Board

CNI802

CNI801

Main Board

Driver

CN201

CN1302

CN401   CN1202

LN46C670M1FXZA

Speaker   T-CON   Speaker

Function

CN201

	CN201(to Power board)		
1	B12V_PW	10	GND
2	A5V_PW	11	GND
3	B12V_PW	12	H_OUT
4	A5V_PW	13	B13V_PW
5	B5V_PW	14	PWM_DIMMING_OUT
6	B5V_PW	15	B13V_PW
7	B5V_PW	16	B5V_PW
8	GND	17	B13V_PW
9	GND	18	IP_DET

Power On Sequence (approximate Voltages)
)
1. **Standby Voltages: CN201-4 (5V)**
2. **Power On CN201-2 (0 – 3V)**
3. **Low Voltage Supplies On CN201-1,3,5,7,13,15,17 (Volts Listed on CN802)**
4. **Back Light On CN201-16 (0-3V, delayed)**
5. **Back Light Confirm CNI802- (FB1 & FB2)**
6. **Dimming Signal CN201-14 (1V–4V approx)**

To Force Backlight On without Main Board :
1. Remove Power Cord
2. Remove CN802
3. Plug Power Cord In.
4. Backlight should be on immediately.

	CN401(to Function/IR)		
1	IR	6	KEY_INPUT1
2	GND	7	KEY_INPUT2
3	A3.3V_PW	8	LED_STB
4	MSCL_A5V	9	LED_CNTR
5	MSDA_A5V	10	A3.3V_PW

TROUBLESHOOTING VIDEO PROBLEMS

1. Verify Video Operation

a. **Customer Picture Test** (models available)
b. **"Display"** (If display is OK source is suspected)
C. Substitute with known good Source
   (**external DVD or Signal Generator**)

2. Using Test Patterns in Service Mode

- ENTER SERVICE MODE –

1. Select an active source signal. (HDMI preferred)
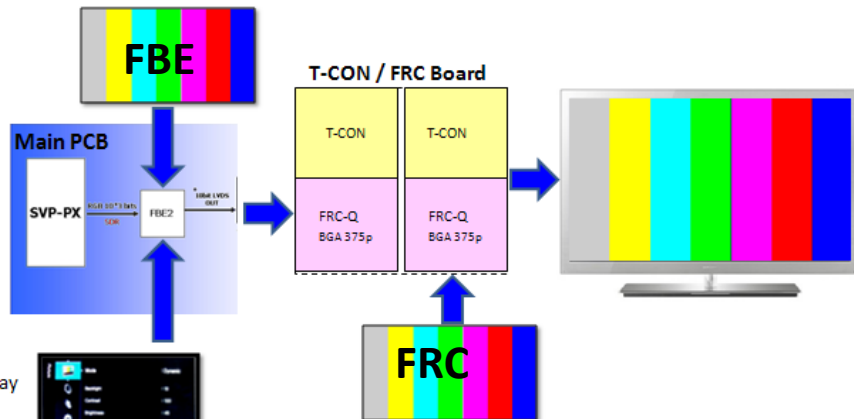   Test Pattern may rely on signal source to appear.

Customer Remote		Service Remote	
2.	Power off	**2.**	Power On
3.	Mute, 182, Power	**3.**	Info, Factory

2010 Models with FRC 120Hz/240Hz

LCD Signal Path for Troubleshooting

FBE

Main PCB

SVP-PX — FBE2

T-CON / FRC Board

T-CON | T-CON
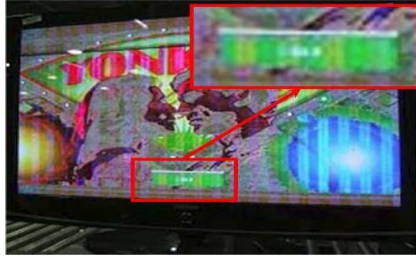FRC-Q BGA 375p | FRC-Q BGA 375p

FRC

Display

Customer Picture Test

1.Check OSD & Customer Picture Test.
2. Access SVC Mode (with source signal)
3. Activate **FBE** Test Patterns & Verify.
4. Activate **FRC** Test Patterns & Verify.

T-Con Troubleshooting

Pin #1~5   F1

T-Con

Check for 13V supply to Pins 1-5 and LVDS Side of F1 Fuse, if 13V is **NOT** present.... → NO → Check for defective LVDS Cable or 13V feed error.

if 13V IS present but NOT on both sides of F1 fuse (Open Fuse).... → NO → Change T-Con Board

3
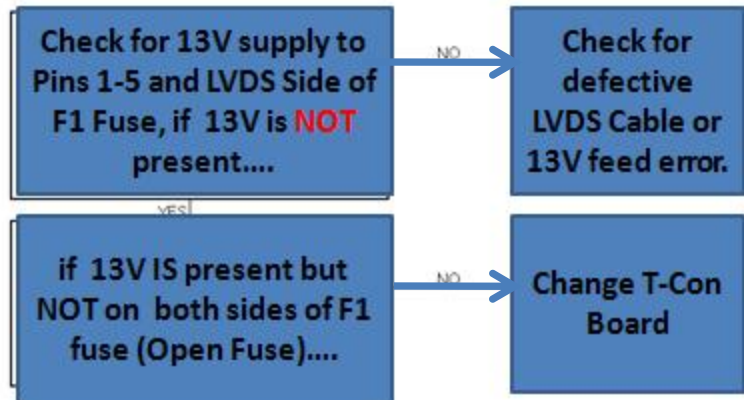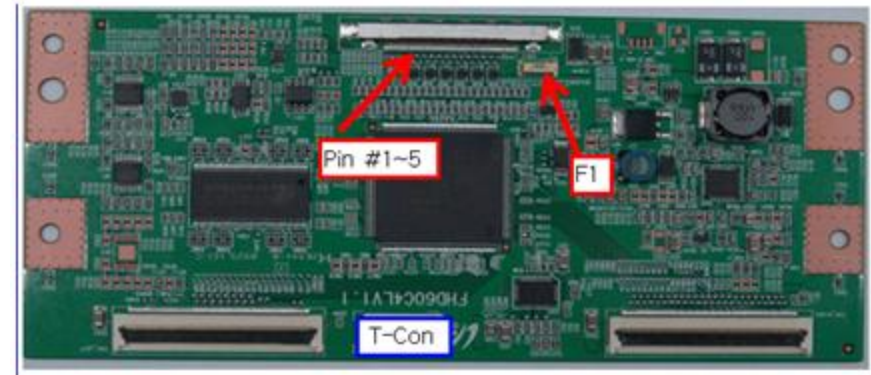
ON SCREEN FAILURE EXAMPLES:

ALIGNMENTS:

1. **Check/Set Option Bytes:**

If Picture & Display errors Defective Main Board, LVDS, or T-CON

Green lines or a green screen defective main board , LVDS , or T-CON.

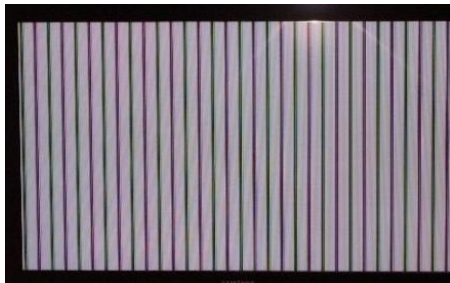**Using the Customer Remote**
1. Turn the power off and set to stand-by mode
2. Press the remote buttons in this order; POWER OFF-MUTE-1-8-2-POWER ON to turn the set on.
3. The set turns on and enters service mode. This may take approximately 20 seconds.
4. Press the Power button to exit and store data in memory.
   - If you fail to enter service mode, repeat steps 1 and 2 above.
5. Initial SERVICE MODE DISPLAY State

Project	PB5G	PB5G	PB5G
Model	B550	B550	B550
Model Code	PN50B550T2FXZA	PN58B550T2FXZA	PN63B550T2FXZA
No.	ITEMS			
1	Factory Reset	-	-	-
2	Type	50FSpL4	58FNfK1	63FMeK1
3	Model	PB550	PB550	PB550
4	TUNER	ALPS	ALPS	ALPS
5	Region	US	US	US
6	DDR	SAMSUNG	SAMSUNG	SAMSUNG
7	Light Effect	Off	Off	Off
8	Inch	50"	58"	63"
9	Exhibition Mode	Off	Off	Off

Option Bytes

Factory Reset	
Type	50HSnB4
Model	PB550
TUNER	ALPS
Region	US
DDR	SAMSUNG
Light Effect	Off
Inch	50"
Exhibition Mode	Off

Pixelization can be caused by the main board but is more commonly a source error

Model Code	Front Color	Type	Model	Tuner	Region	Side Label
LN40C670M1FXZA	T-C-BLK	40L1UF0C	LC670	Semco	US	AA03

2. Check/Perform Firmware Upgrade for all repairs.

3. Perform reset in Service Mode & Plug and Play if Main board is replaced.

SPECIAL NOTES:

Inform customer of reset of all Settings if Main Board or Panel is replaced.

Vertical or Horizontal Lines :Defective Panel likely but also T-CON, LVDS, or Main Board. Use Test Patterns in Factory Service Mode to determine error)